



TRANSMISSION CORPORATION OF TELANGANA LIMITED

From
Chief Engineer
(Comml.&RAC)
Vidyut Soudha,
Hyderabad – 500082.

To
The Secretary, TSERC,
#11-4-660, 5th floor,
Singareni Bhavan, Red Hills,
Hyderabad – 500004.

Lr.No.CE(Comml.&RAC)/SE(Plg)/DE(RAC)/F. RSP-'24-'34/D.No. 93 /23 Dt. 06-11-2023

Sir,

Sub: TSTRANSCO – O.P. No. 9 of 2023 & I.A. No. 6 of 2023 of the Hon'ble
TSERC – Datagaps & Additional information in the Resource Plan
petition – Submission to the Hon'ble Commission – Reg.

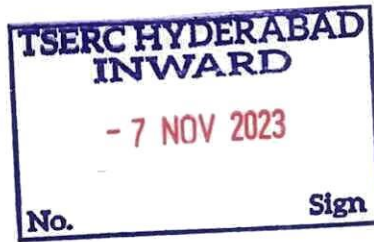
Ref: 1. E-mail dt 05-10-2023 received from the Secretary/TSERC.
2. O.P. No. 09 of 2023 of Hon'ble TSERC

Adverting to the e-mail cited above, the Datagaps & Additional
information sought by the Hon'ble Commission in O.P. No. 9 & I.A. No. 6 of 2023,
the Resource Plan petition filed by TSTRANSCO, are being submitted to the
Commission in 6 Sets.

The receipt of the same may please be acknowledged.

Yours faithfully,

Encl: As above




D. Praveen Maurice 3/4
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(Comml.&RAC)
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Mobile: 8985041522

Copy submitted to:

PS to Joint managing Director(Fin., Comml. &HRD)/TSTRANSCO/VS/Hyderabad.

**TSTRANSCO - Submission of Additional Information to TSERC in
Resource Plan for 5th & 6th Control Period (O.P. No. 9 of 2023 & IA No. 6 of
2023 of the Hon'ble TSERC)** (Ref: e-mail dated 06-10-2023 of the Secretary/TSERC)

I. TSTRANSCO Transmission Plan for 5th and 6th Control Period.

Point No.1:

1. TSTRANSCO to submit the details of its proposed transmission network for each year from FY 2023-24 to FY 2033-34 in MS Excel in the following format (Table-1).

Reply:

Submitted as **Annexure - A**

Point No.2:

2. In para 2.5 and 3.2 of the Petition, TSTRANSCO has submitted scheme wise capital investment plan for 5th and 6th control Period. TSTRANSCO to submit the scheme wise details in the format (in MS Excel) enclosed at Annexure-1 for each category viz., 400 kV sub-stations, 400 kV Transmission Lines etc.,

Reply:

Submitted as **Annexure - B**

Point No.3:

3. The load flow studies and short circuit studies submitted by TSTRANSCO as Annexure-III A, does not mention the underlying assumptions, parameters and methodology adopted for studies. In this regard, TSTRANSCO to submit a detailed write up on the assumptions, parameters and methodology adopted for studies.

Reply:

Submitted as **Annexure - C**

Point No.4:

4. TSTRANSCO to submit the preparedness to execute the proposed capital expenditure for the 5th and 6th control period in terms of funds tie-up, placement of orders etc.

Reply:

System Improvement Scheme works: Funds tie-up yet to be finalized and works will be taken up subsequently.

Lift Irrigation Scheme works: The lift irrigation scheme works are Depository Contribution (DC) works and will be funded by Irrigation & CAD department (Govt. of Telangana).

Point No.5:

5. TSTRANSCO to submit the mode of execution of the proposed capital investment for the 5th and 6th Control Period, to ensure the least cost principles are followed.

Reply:

Mode of execution is by going for Competitive Bidding. Two-part Bidding (Technical bidding & price bid) is done to ensure quality & low cost.

Point No.6:

6. TSTRANSCO to provide details of existing and commissioned Lift Irrigation Scheme.

Reply:

Submitted as **Annexure – D**

Point No.7:

7. TSTRANSCO has proposed the loss trajectory for 5th and 6th control periods at page 8 of the Petition. TSTRANSCO to substantiate the proposed transmission loss trajectory with the proposed capital investment for the 5th and 6th control periods.

Reply:

For the proposed capital investment for the 5th and 6th control periods, the system studies are already submitted.

Transmission system losses are calculated on monthly basis based on actuals (Generation in MU and Sale to Discoms in MU).

The target loss trajectory (%) for the 5th and 6th control period is prepared based on the actual system losses for the 4th control period.

Annexure - A : Details of Transmission Network for 5th & 6th control periods

S.No.	Particulars	FY 2023-24				FY 2024-25				FY 2025-26				FY 2026-27				FY 2027-28				FY 2028-29			
		Opening	Addition	Deletion	Closing	Opening	Addition	Deletion	Closing	Opening	Addition	Deletion	Closing	Opening	Addition	Deletion	Closing	Opening	Addition	Deletion	Closing	Opening	Addition	Deletion	Closing
A	Lines (Ckt km)																								
1	400kV	4443.00	671.00	0.00	5114.00	5114.00	0.00	0.00	5114.00	5114.00	100.00	0.00	5214.00	5214.00	0.00	0.00	5214.00	5214.00	0.00	0.00	5214.00	5214.00	0.00	0.00	5214.00
2	<i>400kV LIS</i>	1333.43	984.71	0.00	2318.14	2318.14	0.00	0.00	2318.14	2318.14	0.00	0.00	2318.14	2318.14	0.00	0.00	2318.14	2318.14	0.00	0.00	2318.14	2318.14	0.00	0.00	2318.14
3	220kV	8332.39	443.20	0.00	8775.59	8775.59	99.00	0.00	8874.59	8874.59	178.00	0.00	9052.59	9052.59	4.00	0.00	9056.59	9056.59	8.00	0.00	9064.59	9064.59	0.00	0.00	9064.59
4	<i>220kV LIS</i>	522.00	290.95	0.00	812.95	812.95	257.00	0.00	1069.95	1069.95	0.00	0.00	1069.95	1069.95	220.00	0.00	1289.95	1289.95	0.00	0.00	1289.95	1289.95	0.00	0.00	1289.95
5	132kV	11527.88	242.06	0.00	11769.94	11769.94	608.03	0.00	12377.97	12377.97	302.30	0.00	12680.27	12680.27	202.50	0.00	12882.77	12882.77	265.60	0.00	13148.37	13148.37	190.80	0.00	13339.17
6	<i>132kV LIS</i>	469.00	0.00	0.00	469.00	469.00	401.48	0.00	870.48	870.48	85.00	0.00	955.48	955.48	90.00	0.00	1045.48	1045.48	0.00	0.00	1045.48	1045.48	0.00	0.00	1045.48
<i>Transco owned Lines TOTAL</i>		24303.27	2098.91	0.00	16207.73	16207.73	99.00	0.00	16306.73	16306.73	278.00	0.00	16584.73	16584.73	4.00	0.00	16588.73	16588.73	8.00	0.00	16596.73	16596.73	0.00	0.00	16596.73
<i>LIS owned Lines TOTAL</i>		2324.43	533.01	0.00	13051.89	13051.89	1266.51	0.00	14318.40	14318.40	387.30	0.00	14705.70	14705.70	512.50	0.00	15218.20	15218.20	265.60	0.00	15483.80	15483.80	190.80	0.00	15674.60
Grand Total Lines		26627.70	2631.92	0.00	29259.62	29259.62	1365.51	0.00	30625.13	30625.13	665.30	0.00	31290.43	31290.43	516.50	0.00	31806.93	31806.93	273.60	0.00	32080.53	32080.53	190.80	0.00	32271.33
B	Transformation Capacity (MVA)																								
<i>Transco PTRs (MVA)</i>		69852.00	5351.00	315.00	74888.00	74888.00	3122.50	0.00	78010.50	78010.50	2787.00	0.00	80797.50	80797.50	1779.00	0.00	82576.50	82576.50	2012.00	0.00	84588.50	84588.50	1076.00	0.00	85664.50
<i>LIS PTRs (MVA)</i>		11995.00	5615.00	0.00	17610.00	17610.00	1727.00	0.00	19337.00	19337.00	0.00	0.00	19337.00	19337.00	0.00	0.00	19337.00	19337.00	0.00	0.00	19337.00	19337.00	0.00	0.00	19337.00
TOTAL Transformation Capacity (MVA)		81847.00	10966.00	315.00	92498.00	92498.00	4849.50	0.00	97347.50	97347.50	2787.00	0.00	100134.50	100134.50	1779.00	0.00	101913.50	101913.50	2012.00	0.00	103925.50	103925.50	1076.00	0.00	105001.50
C	Bays (Nos.)																								
1	400kV	292	24	0	316	316	0	0	316	316	8	0	324	324	0	0	324	324	0	0	324	324	0	0	324
2	<i>400kV LIS</i>	152	213	0	365	365	0	0	365	365	0	0	365	365	0	0	365	365	18	0	383	383	0	0	383
3	220kV	755	27	0	782	782	10	0	792	792	15	0	807	807	0	0	807	807	0	0	807	807	0	0	807
4	<i>220kV LIS</i>	183	51	0	234	234	30	0	264	264	0	0	264	264	6	0	270	270	0	0	270	270	0	0	270
5	132kV	1907	14	0	1921	1921	44	0	1965	1965	27	0	1992	1992	13	0	2005	2005	26	0	2031	2031	16	0	2047
6	<i>132kV LIS</i>	49	0	0	49	49	80	0	129	129	2	0	131	131	4	0	135	135	0	0	135	135	0	0	135
<i>Total Transco Bays</i>		1199	264	0	1463	1463	10	0	1473	1473	23	0	1496	1496	0	0	1496	1496	18	0	1514	1514	0	0	1514
<i>Total LIS owned Bays</i>		2139	65	0	2204	2204	154	0	2358	2358	29	0	2387	2387	23	0	2410	2410	26	0	2436	2436	16	0	2452
Grand Total Bays		3338	329	0	3667	3667	164	0	3831	3831	52	0	3883	3883	23	0	3906	3906	44	0	3950	3950	16	0	3966

Note : TSTransco owned Lines and bays include TSTransco + bulk loads + Generators. Doesnot include Inter-state & LIS.

S. No.	Particulars	FY 2029-30				FY 2030-31				FY 2031-32				FY 2032-33				FY 2033-34			
		Opening	Addition	Deletion	Closing	Opening	Addition	Deletion	Closing	Opening	Addition	Deletion	Closing	Opening	Addition	Deletion	Closing	Opening	Addition	Deletion	Closing
A	Lines (Ckt km)																				
1	400kV	5214.00	0.00	0.00	5214.00	5214.00	0.00	0.00	5214.00	5214.00	0.00	0.00	5214.00	5214.00	0.00	0.00	5214.00	5214.00	0.00	0.00	5214.00
2	<i>400kV LIS</i>	2318.14	0.00	0.00	2318.14	2318.14	0.00	0.00	2318.14	2318.14	0.00	0.00	2318.14	2318.14	0.00	0.00	2318.14	2318.14	0.00	0.00	2318.14
3	220kV	9064.59	110.00	0.00	9174.59	9174.59	90.00	0.00	9264.59	9264.59	120.00	0.00	9384.59	9384.59	100.00	0.00	9484.59	9484.59	120.00	0.00	9604.59
4	<i>220kV LIS</i>	1289.95	0.00	0.00	1289.95	1289.95	0.00	0.00	1289.95	1289.95	0.00	0.00	1289.95	1289.95	0.00	0.00	1289.95	1289.95	0.00	0.00	1289.95
5	132kV	13339.17	30.00	0.00	13369.17	13369.17	45.00	0.00	13414.17	13414.17	30.00	0.00	13444.17	13444.17	30.00	0.00	13474.17	13474.17	50.00	0.00	13524.17
6	<i>132kV LIS</i>	1045.48	0.00	0.00	1045.48	1045.48	0.00	0.00	1045.48	1045.48	0.00	0.00	1045.48	1045.48	0.00	0.00	1045.48	1045.48	0.00	0.00	1045.48
	<i>Transco owned Lines TOTAL</i>	16596.73	110.00	0.00	16706.73	16706.73	90.00	0.00	16796.73	16796.73	120.00	0.00	16916.73	16916.73	100.00	0.00	17016.73	17016.73	120.00	0.00	17136.73
	<i>LIS owned Lines TOTAL</i>	15674.60	30.00	0.00	15704.60	15704.60	45.00	0.00	15749.60	15749.60	30.00	0.00	15779.60	15779.60	30.00	0.00	15809.60	15809.60	50.00	0.00	15859.60
	Grand Total Lines	32271.33	140.00	0.00	32411.33	32411.33	135.00	0.00	32546.33	32546.33	150.00	0.00	32696.33	32696.33	130.00	0.00	32826.33	32826.33	170.00	0.00	32996.33
B	Transformation Capacity (MVA)																				
	<i>Transco PTRs (MVA)</i>	85664.50	420.00	0.00	86084.50	86084.50	520.00	0.00	86604.50	86604.50	420.00	0.00	87024.50	87024.50	420.00	0.00	87444.50	87444.50	520.00	0.00	87964.50
	<i>LIS PTRs (MVA)</i>	19337.00	0.00	0.00	19337.00	19337.00	0.00	0.00	19337.00	19337.00	0.00	0.00	19337.00	19337.00	0.00	0.00	19337.00	19337.00	0.00	0.00	19337.00
	TOTAL Transformation Capacity (MVA)	105001.50	420.00	0.00	105421.50	105421.50	520.00	0.00	105941.50	105941.50	420.00	0.00	106361.50	106361.50	420.00	0.00	106781.50	106781.50	520.00	0.00	107301.50
C	Bays (Nos.)																				
1	400kV	324	0	0	324	324	0	0	324	324	0	0	324	324	0	0	324	324	0	0	324
2	<i>400kV LIS</i>	383	0	0	383	383	0	0	383	383	0	0	383	383	0	0	383	383	0	0	383
3	220kV	807	2	0	809	809	2	0	811	811	4	0	815	815	2	0	817	817	2	0	819
4	<i>220kV LIS</i>	270	0	0	270	270	0	0	270	270	0	0	270	270	0	0	270	270	0	0	270
5	132kV	2047	4	0	2051	2051	2	0	2053	2053	4	0	2057	2057	2	0	2059	2059	2	0	2061
6	<i>132kV LIS</i>	135	0	0	135	135	0	0	135	135	0	0	135	135	0	0	135	135	0	0	135
	<i>Total Transco Bays</i>	1514	2	0	1516	1516	2	0	1518	1518	4	0	1522	1522	2	0	1524	1524	2	0	1526
	<i>Total LIS owned Bays</i>	2452	4	0	2456	2456	2	0	2458	2458	4	0	2462	2462	2	0	2464	2464	2	0	2466
	Grand Total Bays	3966	6	0	3972	3972	4	0	3976	3976	8	0	3984	3984	4	0	3988	3988	4	0	3992

Note : TSTransco owned Lines and bays include TSTransco + bulk loads + Generators. Doesnot include Inter-state & LIS.

Abstract of Capital Expenditure proposed for 5th & 6th Control Period (Rs. In Crores)

[illegible]

Annexure - I
Format for furnishing the details of proposed capitial investment for 5th and 6th Control Periods

S. No.	Object Code	Name of the Scheme	Board Approval Ref.	Proposed Capital Investment	Proposed IDC	Total Capital Investment Proposed	Proposed Capitalization Year	Start Date	Completion Date	Year wise capital expenditure						Year wise debt deployment						Year wise equity deployment						Year wise Capitalization					
										FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total
A		400kV Transmission Schemes (under DC Works) :																															
		2024-25																															
1		Integrated Steel Plant Transmission Scheme	-	436.01	-	436.01	100%	April, 2024	March, 2026	130.80	305.21			-	436.01	-	-	-	-	-	-	-							-	436.01		436.01	
2		Raising/ Re-aligning Towers of existing 400kV QMDC Line from BTPS (Manuguru) to Julurupadu SS for Sitamma Sagar Multi-Purpose Project (D-23-01) - Under DC Work	Board Note approval dated 21.06.2023	166.04	-	166.04	100%	April, 2024	Sept., 2025	83.02	83.02			-	166.04	-	-	-	-	-	-	-							-	166.04		166.04	
		TOTAL		602.05		602.05	2	0	0	213.82	388.23	0	0	0	602.05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	602.05	0	602.05
		2025-26																															
Note: No Investment Plan proposals for the years of 2026-27 to 2028-29 of 5th Control Period, and 2029-30 to 2033-34 of 6th Control Period.																																	
		2025-26																															
Note: No Investment Plan proposals for the years of 2026-27 to 2028-29 of 5th Control Period, and 2029-30 to 2033-34 of 6th Control Period.																																	
		2025-26																															
Note: No Investment Plan proposals for the years of 2026-27 to 2028-29 of 5th Control Period, and 2029-30 to 2033-34 of 6th Control Period.																																	
		2025-26																															
Note: No Investment Plan proposals for the years of 2026-27 to 2028-29 of 5th Control Period, and 2029-30 to 2033-34 of 6th Control Period.																																	
		400kV Schemes TOTAL		602.05						213.820	388.230	0.000	0.000	0.000	602.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	602.050	0.000	602.050
B		220kV & 132 kV Transmission Schemes																															
		2024-25																															
1		132/33kV SS Puttandoddi (V), Ilkyl (M) Erection of 132 kV DC/SC line on Galvanised Towers with Panther ACSR for LILO of 132 kV Alampur – Gadwal line at the proposed 132/33 kV Puttandoddi Sub-Station.	T.O.O (CE-Transmission) Ms. No. 75, Dated: 19.05.2017	13.76		13.76	2025-26	01.04.2024	31.03.2026	8.26	5.50				13.76	6.19	4.13				10.32	2.06	1.38				3.44		13.76			13.76	
2		132/33kV SS Kanchanpally(V) of Valigonda(M) Erection of 132 kV DC/SC line on Galvanised Towers with Panther ACSR from the existing 132/33 kV Sub-Station, Ramannapet to the proposed 132kV Sub-Station at Kanchanpally 1 No 132kV Bay at 132/33 kV Sub-Station	T.O.O (CE-Transmission) Ms. No. 76, Dated:19.05.2017	23.47	2.58	26.05	2025-26	01.04.2024	31.03.2026	15.63	10.42				26.05	10.56	7.04				17.60	3.52	2.35				5.87		26.05			26.05	
3		132/33 kV SS at Choppadandi. 132 kV DC/SC line for LILO of 132 kV line from 220 kV Malyalapally SS to 220 kV Durshed SS at the proposed 132/33 kV Choppadandi SS	T.O.O (CE-Transmission) Ms. No. 86, Dated: 29.05.2017.	22.86	2.51	25.37	2025-26	01.04.2024	31.03.2026	15.22	10.15				25.37	10.29	6.86				17.15	3.43	2.29				5.72		25.37			25.37	
4		132/33kV SS Dandu Malkapur in Yadadri Bhuvanagiri District Erection of 132 KV DC/SC line from 132/33 KV Choutuppal SS to proposed 132/33 KV SS at Dandu Malkapur 1No 132kV Bay at 132/33 KV Choutuppal SS	T.O.O (CE-Construction) Ms. No. 965 Dated: 05.02 2021.	34.73	2.82	37.55	2025-26	01.04.2024	31.03.2026	22.53	15.02				37.55	15.63	10.42				26.05	5.21	3.47				8.68		37.55			37.55	
5		132/33 kV SS K.C.Thanda, Maheswram (M) 132 kV LILO of 132kV Shamsabad-132kV SS Kothur to 132 kV K.C.Thanda	Processed in due course	30.08		30.08	2025-26	01.04.2024	31.03.2026	18.05	12.03				30.08	13.54	9.02				22.56	4.51	3.01				7.52		30.08			30.08	
6		132/33kv SS Boinpally 132 kV LILO of 132kV Durshed -Mallaram line to 132/33 kV SS Boinpally	Processed in due course	31.08		31.08	2025-26	01.04.2024	31.03.2026	18.65	12.43				31.08	13.99	9.32				23.31	4.66	3.11				7.77		31.08			31.08	
7		132/33kV SS at Ankampalem(V), Dammamet (M) 132 kV LILO of 132kV Khammam-132kV SS Peddagopathi to 132 kV Ankampalem	Processed in due course	23.88		23.88	2025-26	01.04.2024	31.03.2026	14.33	9.55				23.88	10.75	7.16				17.91	3.58	2.39				5.97		23.88			23.88	
8		132/33kV SS at Dilwapur 132 kV LILO of 132kV Sarangapur-132kV SS Bhainsa to 132 kV Dilwapur	Processed in due course	33.48		33.48	2025-26	01.04.2024	31.03.2026	20.09	13.39				33.48	15.07	10.04				25.11	5.02	3.35				8.37		33.48			33.48	
9		132/33 kV SS Singarajupally. Erection of 132 kV DC/SC line from upcoming 220/132 KV SS Jangaon to proposed 132/33 KV SS Singarajupally	Processed in due course	46.46		46.46	2025-26	01.04.2024	31.03.2026	27.88	18.58				46.46	20.91	13.94				34.85	6.97	4.65				11.62		46.46			46.46	
10		132/33 KV Bommalaramaram SS 132 KV DC line from 220/132/33 KV SS Bhongiri to proposed 132/33 KV SS Bommalaramaram 2 Nos 132kV Bays at 220/132/33 KV SS Bhongiri	Processed in due course	42.72		42.72	2025-26	01.04.2024	31.03.2026	25.63	17.09				42.72	19.22	12.82				32.04	6.41	4.27				10.68		42.72			42.72	
11		132/33 KV SS Aziznagar. 132 KV DC line from Kanakamamidi toi proposed 132/33 KV SS Aziznagar 2 Nos 132kV Bays at 132/33kV SSKanakamamidi	Processed in due course	30.92		30.92	2025-26	01.04.2024	31.03.2026	18.55	12.37				30.92	13.91	9.28				23.19	4.64	3.09				7.73		30.92			30.92	
12		132/33 KV SS Abdullapurmet 132 KV LILO of 132 KV Ghanpur-Sangli to proposed 132/33 KV SS Abdullapurmet 132 KV 2nd circuit stringing from 132/33 KV SS Ghanapur to 132/33 KV Abdullapurmet SS	Processed in due course	26.11		26.11	2025-26	01.04.2024	31.03.2026	15.67	10.44				26.11	11.75	7.83				19.58	3.92	2.61				6.53		26.11			26.11	

S. No.	Project Code	Name of the Scheme	Board Approval Ref.	Proposed Capital Investment	Proposed IDC	Total Capital Investment Proposed	Proposed Capitalizati on Year	Start Date	Completion Date	Year wise captial expenditure						Year wise debt deployment						Year wise equity deployment						Year wise Capitalization					
										FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total
13		Erection of 132 kV LILO of existing 132 kV Maddur – Makthal DC/SC line to existing newly charged 132/33 kV Narayanpet Sub-Station to meet N -1 Contingency 132kV Bay at 132/33 kV Narayanpet Sub-Station - 2Nos	T.O.O (CE-Construction) MS.No.12 Dated:20.04.2018	5.15	0.51	5.66	2025-26	01.04.2024	31.03.2026	3.40	2.26				5.66	2.32	1.55				3.86	0.77	0.52			1.29		5.66				5.66	
14		132 kV 2nd CKT from 220/132 kV SS Kamareddy to Loc No 33-34 of existing new 132 kV DC/SC line of 132 kV SS Chippapally 132 kV DC/SC line from loc 33-34 of existing new 132 kV DC/SC line of 132 kV SS Chippapally to 132/33 kV SS Domakonda 132 kV 2nd Circuit from 132/33 kV SS Domakonda to 132/33 kV SS Biknur 132kV Bay at 220/132 kV SS Kamareddy- 1 No 132kV Bay at 132/33 kV SS Domakonda - 1 No	T.O.O (CE-Transmission) MS.No.162 Dated:26.08.2015	6.71		6.71	2025-26	01.04.2024	31.03.2026	4.03	2.68				6.71	3.02	2.01				5.03	1.01	0.67			1.68		6.71				6.71	
15		132 KV 2nd circuit stringing from 132/33 KV SS Amangal to 132/33 KV Keshampet SS 132kV Bay at 132/33 KV SS Amangal - 1 No. and 132kV Bay at 132/33 KV SS Keshampet - 1 No.	T.O.O (CE-Construction) MS.No.65 Dated:23.03.2018	8.68		8.68	2025-26	01.04.2024	31.03.2026	5.21	3.47				8.68	3.91	2.60				6.51	1.30	0.87			2.17		8.68				8.68	
16		2nd circuit from 220kV Shadnagar to 132kV SS Srirangapur. 132kV Bay at 220kV SS Shadnagar - 1No 132kV Bay at 132kV SS Srirangapur- 1 No	T.O.O (CE-Construction) Ms.No.1461 Dated:19.08.2022.	5.39	0.40	5.79	2025-26	01.04.2024	31.03.2026	3.47	2.32				5.79	2.43	1.62				4.04	0.81	0.54			1.35		5.79				5.79	
17		Stringing of two circuits on already approved (under construction) 132 KV Multi circuit towers from 220/132 KV SS Manthani upto Loc. No. 19 of existing 132Kv Manthani – Kataram line, Erection of 132 kV DC line from existing Loc. No. 19 upto Loc.No. 34A, of 132 kV Manthani – Kataram line, Stringing of 2nd circuit from newly proposed DC line (from Loc No. 34A of 132 kV Manthani – Kataram) to 132/33 kV Chennur SS on the existing DC/SC line, Stringing of 2nd circuit from Loc. No. 34A of existing 132 kV Manthani – Kataram line to 132/33 kV SS Kataram, 132kV Bay at 220/132 KVSS Manthan - 2 Nos., 132kV Bay at 132 kV SS kataram - 1No. 132kV Bay at 132 kV SS Chennur - 1 No.	T.O.O (CE-Transmission) MS.No.210 Dated:06.11.2015	12.13		12.13	2025-26	01.04.2024	31.03.2026	7.28	4.85				12.13	5.46	3.64				9.10	1.82	1.21			3.03		12.13				12.13	
18		33KV features at 132KV Railway Traction Switching Station, Kothagudem, Bhadradi Kothagudem District	T.O.O. (CE-Construction) Ms. No. 1760 Dated: 19.08.2023.	12.94	0.50	13.44	2025-26	01.04.2024	31.03.2026	8.06	5.38				13.44	5.82	3.88				9.71	1.94	1.29			3.24		13.44				13.44	
19		132/33kV SS Vemula (V), Addakal (M) 132 kV DC/SC line from 132/33kV SS Khillaghnapur to the proposed 132/33 kV Vemula SS on galvanised towers with panther ACSR Conductor 132kV Bay Extension (1No at 132kV SS Khillaghanapur)	T.O.O (CE-Construction) Ms.No.1491 Dated: 20.10.2022.	31.08	1.84	32.92	2025-26	01.04.2024	31.03.2026	19.75	13.17				32.92	13.99	9.32				23.31	4.66	3.11			7.77		32.92				32.92	
20		Erection of 132 kV DC/SC line from 220/132 kV SS Madugula to 132kV Switching station Godakondla in Nalgonda Dist. 132kV Bay 1 No at 220 kV SS Madugula and 132kV Bay 1 No at 132 kV SWS Godakondla	T.O.O (CE-Construction) MS.No.1552 Dated:16.01.2023	19.97	1.03	21.00	2025-26	01.04.2024	31.03.2026	12.60	8.40				21.00	8.99	5.99				14.98	3.00	2.00			4.99		21.00				21.00	
21		Making LILO of 132 kV Dhamaram - Godur line to 220/132 KV SS Jagityal in Jagityal District. 132KV Bays at 220/132 kV SS Jagityal.	T.O.O (CE-Construction) MS.No.1590	4.94	0.18	5.12	2025-26	01.04.2024	31.03.2026	3.07	2.05				5.12	2.22	1.48				3.71	0.74	0.49			1.24		5.12				5.12	
22		2nd circuit stringing on existing DC/SC solid tapping line from tapping tower location No. 28 of 132 Kv Pochampad - Nimal line up to 132/33 kV SS Burgupally. In Adilabad Dist. 132kV Bay at 132/33 kV SS Burugupally	Processed in due course	7.41		7.41	2025-26	01.04.2024	31.03.2026	4.45	2.96				7.41	3.33	2.22				5.56	1.11	0.74			1.85		7.41				7.41	
23		132 kV DC line from 220/132/33kV SS Shapumagar to 132/33kV SS Chintal (including 1 km 630 sq mm cable) in Medchal – Malkajigiri Dist 2 No at 220/132/33 kV SS Shapumagar & 2 No at 132/33 kV Chintal SS	Processed in due course	17.88		17.88	2025-26	01.04.2024	31.03.2026	10.73	7.15				17.88	8.05	5.36				13.41	2.68	1.79			4.47		17.88				17.88	
24		220/33 KV Substation at Kollur LILO of one circuit of existing 220KV Gachibowli - Shankarpally DC line at proposed 220/33KV Kollur SS.	Processed in due course	26.87		26.87	2025-26	01.04.2024	31.03.2026	16.12	10.75				26.87	12.09	8.06				20.15	4.03	2.69			6.72		26.87				26.87	
25		220 KV DC line from 400/220/132 KV Narsapur ss to 220/132/33 KV Minpur SS at 400/220/132kV Narsapur SS - 2Nos and at 220/132/33 KV Minpur SS- 2Nos	Processed in due course	119.32		119.32	2025-26	01.04.2024	31.03.2026	71.59	47.73				119.32	53.69	35.80				89.49	17.90	11.93			29.83		119.32				119.32	

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										FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total
26		Providing second Source of supply to 220/132kV GISS Osmania University from 220kV SS Nagole by Laying of 220kV XLPE UG Cable	Processed in due course	133.92		133.92	2025-26	01.04.2024	31.03.2026	80.35	53.57				133.92	60.26	40.18				100.44	20.09	13.39				33.48		133.92			133.92	
	at 220/132/33kV SS Nagole- 2Nos and at GIS feeder Bays at 220/132kV GIS SS Osmania University-2Nos																																
27		220/33 kV GIS Substation Nemalinagar in Rangareddy Dist. Making LILO of 220KV Shivarampally-Gachibowli OH Line to proposed 220/33KV GIS SS Nemalinagar i with 220KV 1200 Sq.mm UG cable.(3km) ii.with OH line on 400 kV Multi circuit Monopole tower with CTT	T.O.O. (CE-Construction) Ms.No.1617 Dated: 12.04.2023.	175.42	12.96	188.38	2025-26	01.04.2024	31.03.2026	113.03	75.35				188.38	78.94	52.63				131.57	26.31	17.54				43.86		188.38			188.38	
28		220/33 kV Substation in the premises of Central Power Research Institute (CPRI) with SAS automation, Hyderabad	T.O.O (CE-Construction) MS.No .1594 Dated:09.02.2022	27.13	2.00	29.13	2025-26	01.04.2024	31.03.2026	17.48	11.65				29.13	12.21	8.14				20.35	4.07	2.71				6.78		29.13			29.13	
29		33 kV features at existing 220/132 KV SS Thimmajipet, Marikal (V) in Thimmajipet (M), Nagarkurnool District.	Processed in due course	7.86		7.86	2025-26	01.04.2024	31.03.2026	4.72	3.14				7.86	3.54	2.36				5.90	1.18	0.79				1.97		7.86			7.86	
30		Making LILO of one circuit of existing 220 KV Jagtial – Nirmal DC line to 400 KV SS Nirmal in karimnagar Dist. 2 Nos 220kV Bays at 400/220kV Nirmal	Processed in due course	17.60		17.60	2025-26	01.04.2024	31.03.2026	10.56	7.04				17.60	7.92	5.28				13.20	2.64	1.76				4.40		17.60			17.60	
31		220/33 kV GIS Substation at Alwal (R.P.Nilayam) in the premises of proposed TIMS (Telangana Institute of Medical Science) super specialty hospital in Medchal-Malkajigiri District instead of 132/33 kV AIS / GIS at R.P.Nilayam in Medchal-Malkajigiri District Making LILO of 220KV Shapurmagar - Moulali over head line (proposed to upgrade from existing 132 kV to 220 kV) with HTLS conductor to proposed 220/33 kV GIS Substation Alwal (R.P. Nilayam)	Processed in due course	108.95		108.95	2025-26	01.04.2024	31.03.2026	65.37	43.58				108.95	49.03	32.69				81.71	16.34	10.90				27.24		108.95			108.95	
32		132kV DC line with Single moose from proposed 220/132 kV Indravelly SS to 132/33 kV Asifabad SS on 220kV Galvanized DC towers 132kV Bays at 132/33 kV Asifabad SS- 2Nos	T.O.O. (CE-400kV) Ms.No.07 Dated: 09.01.2018	61.86		61.86	2026-27	01.04.2024	31.03.2026	37.12	24.74				61.86	27.84	18.56				46.40	9.28	6.19				15.47		61.86			61.86	
33		132/33kV SS Seetharambagh Erection of 132 kV DC line with 630 Sqmm 132 kV UG cable from Asifnagar Sub-Station to the proposed 132/33 kV GIS substation at Seetharambagh 132kV Bay at 132/33kV Asifnagar SS - 2Nos	T.O.O (CE-Transmission) Ms. No. 28, Dated: 27.02.2017.	63.63	5.09	68.72	2026-27	01.04.2024	31.03.2026	41.23	27.49				68.72	28.63	19.09				47.72	9.54	6.36				15.91		68.72			68.72	
		TOTAL		1234.39		1266.81				760.086	506.724	0	0	0	1266.81	555.476	370.317	0	0	0	925.793	185.159	123.439	0	0	0	308.60	0.00	1266.81	0.00	0.00	0.00	1266.81
		2025-26																															
1		132/33 kV SS at Tallapet. 132 kV DC line for LILO of upcoming 132 kV Dharmapuri - Luxettipet at the proposed 132/33 kV SS, Tallapet	T.O.O (CE-Transmission) Ms. No. 176 Dated: 22.12.2016.	16.59		16.59	2026-27	01.04.2025	31.03.2027		9.95	6.64			16.59		7.47	4.98			12.44		2.49	1.66			4.15		16.59			16.59	
2		132/33 kV SS at Pittam 132 kV DC/SC line from 220/132/33kV Banswada SS to the proposed 132/33 kV Pittam SS.	T.O.O (CE-Construction) Ms. No.13 Dated:	32.56	3.24	35.80	2026-27	01.04.2025	31.03.2027		21.48	14.32			35.80		14.65	9.77			24.42		4.88	3.26			8.14		35.80			35.80	
3		132 kV DC/SC line from existing 132/33 kV Zaheerabad SS to existing 132/33 kV SS Narayankhed 132kV Bay at 132/33 kV Zaheerabad SS - 1No and 132kV Bay at 132/33 kV SS Narayankhed- 1No	T.O.O (CE-Construction) Ms. No. 44 Dated:06.03.2018.	54.87	5.48	60.35	2026-27	01.04.2025	31.03.2027		36.21	24.14			60.35		24.69	16.46			41.15		8.23	5.49			13.72		60.35			60.35	
4		connecting the existing 132 kV Shapurmagar – Bhongir – Aleru line to 400/220/132 kV Malkaram SS and 400/220/132 kV Ghanapur SS (UG cable) Second circuit stringing of existing 132 kV DC/SC line for connecting the existing 132 kV Shapurmagar – Bhongir – Aleru idle line to 400/220/132 kV Malkaram Sub-Station 132kV Bay at 220 KV SS Shapurmagar - 1No 132kV Bay at 400 KV SS Malkaram - 1 No	T.O.O (CE-Construction) MS.No .11 Dated: 20.04.2018	18.36	1.56	19.92	2026-27	01.04.2025	31.03.2027		11.95	7.97			19.92		8.26	5.51			13.77		2.75	1.84			4.59		19.92			19.92	
5		Erection of 132 kV Multi circuit towers with ACSR panther conductor for making LILO of 132kV Warangal-Kamalapur line and 132 KV Warangal-Kalvasrinampur line to existing 220 kV SS Nagaram.	T.O.O (CE-Construction) Ms.No.1212 Dated:07.10.2021.	4.11		4.11	2026-27	01.04.2025	31.03.2027		2.47	1.64			4.11		1.85	1.23			3.08		0.62	0.41			1.03		4.11			4.11	
6		132kV DC line from 132/33kV SS munugodu to 400/220/132kV SS choutuppal 132kV Bay at 132/33kV SS mnugodu - 2Nos 132kV Bay at 400/220/132kV SS choutuppal - 2Nos	Processed in due course	29.28		29.28	2026-27	01.04.2025	31.03.2027		17.57	11.71			29.28		13.18	8.78			21.96		4.39	2.93			7.32		29.28			29.28	
7		Erection of 132/33kV SS at Muthireddy gudem village of Muthkondur Mandal Yadadri bhongir Dist Erection of 132kV DC/SC line from 132/33kV SS Mothkur to 132/33kV SS Muthireddygudem in Yadadri District. 1 No 132kv bay at 132/33 KV SS Mothkur	Processed in due course	49.82		49.82	2026-27	01.04.2025	31.03.2027		29.89	19.93			49.82		22.42	14.95			37.37		7.47	4.98			12.46		49.82			49.82	

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										FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total
8		Erection of 132kV DC/SC line from 220/132kV SS Husnabad to 132/33kV SS Mustyal in Jangaon District.	Processed in due course	31.25		31.25	2026-27	01.04.2025	31.03.2027		18.75	12.50			31.25		14.06	9.38			23.44		4.69	3.13			7.81			31.25		31.25	
		132kV Bay at 220/132/33 KV SS Husbanbad & 132kV Bay at 132/33 kV Mustyal SS																															
9		2 nd circuit stringing from 132/33 kV SS NV puram to 132/33 kV SS Kamalapuram in Warangal Dist.	Processed in due course	3.54		3.54	2026-27	01.04.2025	31.03.2027		2.12	1.42			3.54		1.59	1.06			2.66		0.53	0.35			0.89			3.54		3.54	
		132kV Bay at 132/33 KV SS NV Puram & 132kV Bay at Kamalapuram																															
10		Erection of 132kV DC line from 220/132/33kV SS Renjal to 132/33kV SS Nandipet	Processed in due course	40.38		40.38	2026-27	01.04.2025	31.03.2027		24.23	16.15			40.38		18.17	12.11			30.29		6.06	4.04			10.10			40.38		40.38	
		2 No 132kV Bays at 220/132 KV SS Renzal & 2 No 132kV Bays at 132/33 kV Nandipet SS																															
11		2nd circuit Stringing from 132/33kV SS Pudur to 132/33/11 kV SS Gangadhara in karimnagar Dist.	Processed in due course	4.05		4.05	2026-27	01.04.2025	31.03.2027		2.43	1.62			4.05		1.82	1.22			3.04		0.61	0.41			1.01			4.05		4.05	
		132kV Bay at 132/33kV SS Pudur & 132kV Bay at 132/33/11 kV SS Gangadhara																															
12		132kV features at existing 220/33kV SS Nagaram	T.O.O (CE-Construction) Ms.No.1212 Dated:07.10.2021.	25.91	3.29	29.20	2026-27	01.04.2025	31.03.2027		17.52	11.68			29.20		11.66	7.77			19.43		3.89	2.59			6.48			29.20		29.20	
13		220KV Single Moose DC Line from proposed 400/220/132kV KTRP SS to 220/132kV Manthani SS	Processed in due course	71.24		71.24	2026-27	01.04.2025	31.03.2027		42.74	28.50			71.24		32.06	21.37			53.43		10.69	7.12			17.81			71.24		71.24	
		220kV Bays at 220kV SS Manthani - 2 Nos																															
14		LILO of both circuits of 220KV Malkaram-Marketpally DC line to proposed 400/220/132 KV Choutuppal SS on Multi Circuit towers	Processed in due course	44.10		44.10	2026-27	01.04.2025	31.03.2027		26.46	17.64			107.30		19.85	13.23			33.08		6.62	4.41			11.03			44.10		44.10	
15		Up gradation of existing 132/33 KV RC Puram SS to 220/132/33 KV SS	T.O.O (CE-Construction) Ms. No.713 Dated: 12.02.2020	63.20		63.20	2026-27	01.04.2025	31.03.2029																								
		Up gradation of existing 132 KV Gachibowli-RC Puram DC line to 220 KV DC line									37.92	25.28			63.20		28.44	18.96			47.40		9.48	6.32			15.80			63.20		63.20	
		at 220kV Gachibowli SS - 2 Nos with PASS Module																															
		TOTAL		489.26		502.83				0.00	301.70	201.13	0.00	0.00	601.39	0.00	220.17	146.78	0.00	0.00	366.95	0.00	73.39	48.93	0.00	0.00	122.32	0.00	0.00	502.83	0.00	0.00	502.83
		2026-27																															
1		132/33 kV Substation at PTO, Petlaburz	T.O.O (CE-Transmission) Ms. No. 29, Dated: 27.02.2017.	26.40	3.20	29.60	2027-28	01.04.2026	31.03.2028																								
		132 kV DC line with 630 Sqmm 132 kV UG cable and 132 kV DC OH line on galvanised double circuit towers with Panther ACSR from the 220 kV GIS substation, Imilibun to the proposed 132/ 33 kV GS SS at Police Transport Organisation (PTO), Petlaburz										17.76	11.84		29.60			11.88	7.92		19.80			3.96	2.64		6.60			29.60		29.60	
2		132/33kV SS at Kothanandikonda(V) , Adavidevulapally (M)	Processed in due course	57.36		57.36	2027-28	01.04.2026	31.03.2028																								
		132kV DC/SC line from 132/33kV SS Wadapally to 132/33 kV Kothanandikonda SS										34.42	22.94		57.36			25.81	17.21		43.02			8.60	5.74		14.34			57.36		57.36	
		132kV Bay at 132/33kV SS Wadapally - 1 No 132kV Bay at 132/33kV SS Kothanandikonda - 1 No																															
3		132/33 KV SS Neredugomma.	Processed in due course	43.32		43.32	2027-28	01.04.2026	31.03.2028																								
		132kV DC/SC line from 132/33kV SS Guntipally to 132 kV Neredugomma										25.99	17.33		43.32			19.49	13.00		32.49			6.50	4.33		10.83			43.32		43.32	
		132kV Bay at 132/33kV SS Guntipally-1 No 132kV Bay at 132/33kV SS Neredugomma-1 No																															
4		132kV DC Line from proposed 220/132 kV Indravelly SS to 132/33 kV Uttoor SS .	T.O.O. (CE-400kV) Ms.No.07 Dated: 09.01.2018	9.57		9.57	2027-28	01.04.2026	31.03.2028																								
		132kV Bay at 132/33 kV Uttoor SS - 2Nos										5.74	3.83		9.57			4.31	2.87		7.18			1.44	0.96		2.39			9.57		9.57	
5		2nd circuit stringing from 132kV SS Nandipet to 132kV LI SS CH. Kondur	Processed in due course	31.45		31.45	2027-28	01.04.2026	31.03.2028																								
		Making LILO of 132kV Nandipet - CH.Kondur line to 132kV LI SS Bagepally										18.87	12.58		31.45			14.15	9.44		23.59			4.72	3.15		7.86			31.45		31.45	
		132kV Bay at 132kV SS Nandipet - 1No and 132kV Bay at 132kV LI SS CH. Kondur - 1No 132kV Bay at 132kV LI SS Bagepally - 2Nos																															
6		132/33 KV SS Pangal.	Processed in due course	39.68		39.68	2027-28	01.04.2026	31.03.2028																								
		132 kV DC line from 220/132/33kV SS wanaparthy to 132/33kV SS Pangal in Wanaparthy Dist.										23.81	15.87		39.68			17.86	11.90		29.76			5.95	3.97		9.92			39.68		39.68	
		2 Nos 132kV Bays at 220 kV Wanaparthy																															
7		132/33 KV SS at Peddapally, Karimnagar Dist	Processed in due course	38.89		38.89	2027-28	01.04.2026	31.03.2028																								
		132kV DC/SC line from 132KV SS Kamanpur to proposed 132/33 KV SS at Peddapally										23.33	15.56		38.89			17.50	11.67		29.17			5.83	3.89		9.72			38.89		38.89	
		132kV Bay at 132KV SS Kamanpur SS - 1No.																															
8		220/33kV SS Sainikpuri	Processed in due course	61.45		61.45	2027-28	01.04.2026	31.03.2028																								
		Proposed upgrade 132kV Moulali-Gunrock line to 220kV line duly making LILO to proposed 220/33kV SS Sainikpuri with 1000Sq.mm XLPE UG Cable										36.87	24.58		61.45			27.65	18.44		46.09			9.22	6.15		15.36			61.45		61.45	
9		132 KV & 33 KV features at existing 220 KV SS Switching station, Chalakurthy	Processed in due course	61.88		61.88	2027-28	01.04.2026	31.03.2028			37.13	24.75		61.88			27.85	18.56		46.41			9.28	6.19		15.47			61.88		61.88	
		TOTAL		1037.80		1054.57				0.00	0.00	223.92	149.28	0.00	373.20	0.00	0.00	166.50	111.00	0.00	277.50	0.00	0.00	55.50	37.00	0.00	92.50	0.00	0.00	0.00	373.20	0.00	373.20

S. No.	Project Code	Name of the Scheme	Board Approval Ref.	Proposed Capital Investment	Proposed IDC	Total Capital Investment Proposed	Proposed Capitalizati on Year	Start Date	Completion Date	Year wise captial expenditure						Year wise debt deployment						Year wise equity deployment						Year wise Capitalization																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
										FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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S. No.	Project Code	Name of the Scheme	Board Approval Ref.	Proposed Capital Investment	Proposed IDC	Total Capital Investment Proposed	Proposed Capitalization on Year	Start Date	Completion Date	Year wise capital expenditure						Year wise debt deployment						Year wise equity deployment						Year wise Capitalization					
										FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total
		2028-29																															
1		132/33 kV Substation at Kondapur (V) & Dhanwada (M). 132 kV DC/SC Line from 132 kV SS, Maddur to 132/33 kV SS, Kondapur 132kv bay at 132 kV SS, Maddur - 1 No 132kv bay at 132/33 kV SS, Kondapur - 1 No	T.O.O (CE-Construction) Ms. No. 2 Dated: 03.01.2015.	24.49	1.89	26.38	2029-30	01.04.2028	31.03.2030					15.83	15.83						11.02	11.02				3.67	3.67						0.00
2		2nd circuit from 132/33kV SS Yerrabelli to 132.33kV SS Munugodu 132kV Bay at 132/33kV SS Yerrabelli - 1No 132kV Bay at 132/33kV SS Munugodu- 1No	Processed in due course	9.18		9.18	2029-30	01.04.2028	31.03.2030					5.51	5.51						4.13	4.13				1.38	1.38						0.00
3		2nd circuit from 220kV SS Budidampadu to Yellandu 132kV Bay at 220kV SS Budidampadu - 1No 132kV Bay at 132kV SS Yellandu- 1No	Processed in due course	7.14		7.14	2029-30	01.04.2028	31.03.2030					4.28	4.28						3.21	3.21				1.07	1.07						0.00
4		2nd circuit stringing from 132kV SS Chelpur to existing 132/33KVSS Regonda in Warangal District 132kV Bay at 132kV SS Chelpur - 1No 132kV Bay at 132kV SS Regonda- 1No		4.59		4.59	2029-30	01.04.2028	31.03.2030					2.75	2.75						2.07	2.07				0.69	0.69						0.00
5		2nd circuit stringing from 132kV Ayyagaripally SS to 132kV SS Domakal 132kV Bay at 132kV SS Ayyagaripally - 1No 132kV Bay at 132kV SS Domakal- 1No	Processed in due course	5.44		5.44	2029-30	01.04.2028	31.03.2030					3.26	3.26						2.45	2.45				0.82	0.82						0.00
6		2nd circuit stringing from 132/33kV SS Ayyagaripally to existing 132/33kV SS Nellikuduru in Mahabubabad 132kV Bay at 132kV SS Ayyagaripally - 1No 132kV Bay at 132kV SS Nellikuduru- 1No	Processed in due course	6.63		6.63	2029-30	01.04.2028	31.03.2030					3.98	3.98						2.98	2.98				0.99	0.99						0.00
7		132kV DC/SC line from 220/132kV SS Janagaon to 132/33 KV SS Mustyala in Janagaon District 132kV Bay at 220kV SS Janagaon - 1No 132kV Bay at 132kV SS Mustyala- 1No		27.42		27.42	2029-30	01.04.2028	31.03.2030					16.45	16.45						12.34	12.34				4.11	4.11						0.00
8		2nd circuit stringing from 220/132kV SS Jangaon to 132/33 KV SS Bachannapet in Janagaon District 132kV Bay at 220kV SS Janagaon - 1No 132kV Bay at 132kV SS Bachannapet- 1No	Processed in due course	4.36		4.36	2029-30	01.04.2028	31.03.2030					2.62	2.62						1.96	1.96				0.65	0.65						0.00
9		33 KV features at 220/11 KV Vernnur.	Processed in due course	15.00		15.00	2029-30	01.04.2028	31.03.2030					9.00	9.00						6.75	6.75				2.25	2.25						0.00
		TOTAL		104.25		106.14				0.00	0.00	0.00	0.00	63.68	63.68	0.00	0.00	0.00	0.00	46.91	46.91	0.00	0.00	0.00	0.00	15.64	15.64	0.00	0.00	0.00	0.00	0.00	0.00
		220kV & 132 kV Transmission Schemes TOTAL								760.09	808.42	425.05	421.54	245.19	2758.85	555.48	590.48	313.28	315.20	183.04	1957.48	185.16	196.83	104.43	105.07	61.01	652.49	0.00	1266.81	502.83	373.20	453.77	2596.61

C	RMI & Augmentation of PTR, SS & Lines Schemes																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											</
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Annexure - I

Format for furnishing the details of proposed capital investment for 5th and 6th Control Periods

No.	Project Code	Name of the Scheme	Board Approval Ref.	Proposed Capital Investment	Proposed IDC	Total Capital Investment Proposed	Proposed Capitalization Year	Start Date	Completion Date	Year wise capital expenditure						Year wise debt deployment						Year wise equity deployment						Year wise Capitalization						
										FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	
A	Lift Irrigation Schemes :																																	
		2024-25																																
1	Bulk Load/	Kaleshwaram Lift Irrigation Project	T.O.O. (CE-LIS) Ms.No.816, Dt:07.08.2020	30.4		3086.446	'2020	Aug-16	jun'20	30.4						0						0											0	
	DC Works	(400kV Medaram,400kV Ramadugu,400kV Sundilla,220kV Medigadda, 220kV Annaram, 400kV Tippapur, 400kV Chandlapur,400kV Tukkapur, 132kV Malakpet)	T.O.O. (CE-LIS) Ms.No.817, Dt:07-08-2020																															
2	Bulk Load/	Kaleshwaram Additional 1 TMC Scheme	T.O.O. (CE-LIS) Ms.No. 848, Dt. 18 -09-2020.	918.33		2946.53	'2024	Oct'21	Jun'24	918.33						0						0											0	
	DC Works	(a) 400/11 kV Velgatoor SS (b) 400/11 kV Pegadapally SS (c)400KV Kachapur Switching Station (d) 400 /11 kV Vellipur Sub-Station (e) 400/11 kV Chinagundavelli (Yellaipally) Sub-Station (f) 400/11 KV New Tukkapur SS (g)400/220 kV Annaram SS (h) 220 kV TMDC Line from 400/220 KV Annaram SS to 220/11 KV SS at Medigadda -48 KM ,Connected Lines and	T.O.O. (CE-LIS) Ms.No.849 Dt.18 -09-2020																															
3	Bulk Load/	Kaleshwaram PKGS-20,21&22	T.O.O. (CE-LI) Ms.No. 02, Dt. 22 -01-2014.	22.5		264.82	'2023	Jan'19	Dec'23	22.5						0						0											0	
	DC Works	220/11kV Sarangapur, 220/11kV Manichippa, 220/11kV Yacharamthanda	T.O.O. (CE-LI) Ms.No. 03, Dt.22 -01-2014.																															
4	Bulk Load/	Kaleshwaram Lift Irrigation Schemes	T.O.O. (ED-LIS) Ms.No. 415, Dt.24.07.2019	3.5		67.77	'2022	Mar'20	Mar'22	3.5						0						0											0	
	DC Works	220/11 kV New Manchippa SS and 220/11 kV New Mentrappally SS	T.O.O. (ED-LIS) Ms.No. 416, Dt.24.07.2019																															
5	Bulk Load/	JCR Phase-III 220/11kV Devvanapeta SS	T.O.O. (ED -LIS) Ms.No. 765 Dt.22 -05-2020.	5		138.66	'2024	Dec-19	Apr-24	5						0						0										0		
	DC Works	220/11kV Devvanapeta SS	T.O.O. (ED -LIS) Ms.No. 766 Dt. 22 -05-2020.																															
6	Bulk Load/	Kaleshwaram Lift Irrigation Scheme- Package -14	T.O.O. (CE-LIS) Ms.No. 369 , Dt.28-05-2019.	4.78		197.66	'2020	Apr-18	Apr'20	4.78						0						0										0		
	DC Works	(Akkaram & Markook)	T.O.O. (CE-LIS) Ms.No.370, Dt.28 -05-2019.																															
7	Bulk Load/	Thumilla Lift Irrigation (RDS)	T.O.O. (CE -LIS) Ms.No.985 Dt.26-02-2021.	0.3		34.3	'2018	Jun-18	Nov'18	0.3						0						0										0		
	DC Works	132/11kVThumilla	T.O.O. (CE -LIS) Ms.No.986 Dt.26-02-2021.																															
8	Bulk Load/DC Works	(b) 132/11 kV Rajavaram SS	T.O.O. (ED-LIS) Ms.No.749, Dt.15 .04.2020	0.513		22.43	'2022	Mar-20	Mar-22	0.513						0						0										0		
9	Bulk Load/	Lift Irrigation Scheme along Flood Flow Canal	T.O.O. (CE -LIS) Ms.No.881 Dt:13.11.2020	4		186.9	'2020	Feb-18	May-20	4						0						0										0		
	DC Works	220/11 kV Rampur SS, 220/11kV Rajeswerraopeta SS, 220/11kV Mupkal SS	T.O.O. (CE -LIS) Ms.No. 882 Dt. 13.11.2020																															
10	Bulk Load/DC Works	Thotapally Reservoir to Gouravelly Reservoir LIS (220/132kV Huzurabad SS and CL)	T.O.O. (CE -LIS) Ms.No.384, Dt.19.01.2012	3		69.7	'2022	Feb-15	Mar-22	3						0						0										0		
11	Bulk Load/	Chanaka Korata LIS	T.O.O. (CE -LIS) Ms.No.925 Dt.15.12.2020	1		43.49	'2019	Apr-17	May-19	1						0						0										0		
	DC Works	132/11kV Hatighat	T.O.O. (CE -LIS) Ms.No.926 Dt.15.12.2020																															
12	Bulk Load/	Kaleshwaram Lift Irrigation Scheme Alternate Route to Medigadda -Lines and Bays		23		55.78				23						0						0										0		
13	Bulk Load/	CHITYALA & WADAPALLY LIS	T.O.O. (CE-LIS) Ms.No.362 Dt.13 - 05-2019.	7		67.13				7						0						0										0		
	DC Works	a)132/11kV Chityala SS,Connected Lines and Bays b)132/11kV Wadapally SS,Connected Lines and Bays	T.O.O. (CE-LIS) Ms.No.363 Dt.13 - 05-2019.																															
14	Bulk Load/	KAMBALAPALLY LIS	T.O.O. (CE-LIS) Ms.No.1234 Dt. 10.11.2021	34.42		94.42				34.42						0						0										0		
	DC Works	132/11kV Kambalapally SS ,Connected Lines and Bays	T.O.O. (CE-LIS) Ms.No. 1235 Dt.10.11.2021.																															
15	Bulk Load/	AMBA BHAVANI LIS	T.O.O. (CE-LIS) Ms.No.1234 Dt. 10.11.2021	7.28		17.28				7.28						0						0									0			
	DC Works	132/11kV Ambabhavani SS,Connected Lines and Bays	T.O.O. (CE-LIS) Ms.No. 1235 Dt.10.11.2021.																															
16	Bulk Load/	NELLIKAL LIS	T.O.O. (CE-LIS) Ms.No. 1161 Dt.16.08.2021	7.8		21.8				7.8						0						0									0			
	DC Works	132/11kV Nellikal SS ,Connected Lines and Bays	T.O.O. (CE-LIS) Ms.No.1162 Dt.16.08.2021																															

C	Palamur-RangaReddy Lift Irrigation Transmission Schemes :																															
FY 2024-25																																
1	Bulk Load/DC Works	Palamuru Rangareddy Lift Irrigation Scheme under phase-I & II works (Erection of 400/11kV Narlapur LISS, 400/11kV Yedula LISS, 400/11kV Vattem LISS and 400/11kV Uddandapur LISS alongwith connected lines & Bays for lifting 1TMC water)	T.O.O.(CE-400kV) Ms.Nos.467 & 468, Date: 25-10-2019.	407.01		2155.04	2024	March 2018	August 2024	407.01		407.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL				407.01						407.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FY 2025-26																																
1	Bulk Load	System Improvement Scheme(Incorporation of 220/132kV features in existing 400/11kV Uddandapur LISS in Mahabubnagar district with 2nos.400/220kV,500MVA & 2nos.220/132kV,160MVA Transformers and 220kV & 132kV Transmission lines.)	T.O.O.(CE-PRLIS) Ms.No.1776, Date: 11.09.2023.	200.00	*	452.48	2027				200.00	200.00																				
(*) - The Amount includes Estt & Other Charges,Contingencies etc.										0.00	200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL				200.00						0.00	200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FY 2026-27																																
1	Bulk Load	System Improvement Scheme(Incorporation of 220/132kV features in existing 400/11kV Uddandapur LISS in Mahabubnagar district with 2nos.400/220kV,500MVA & 2nos.220/132kV,160MVA Transformers and 220kV & 132kV Transmission lines.)	T.O.O.(CE-PRLIS) Ms.No.1776, Date: 11.09.2023.	152.48	*	452.48	2027				252.48	252.48																				
2	Bulk Load/DC Works	Palamuru Rangareddy Lift Irrigation Scheme (400/11kV,165MVA PTR Bay extensions at 400/11kV NarlapurSS,400/11kV Yedula LISS,400/11kV Vattem LISS & 400/11kV Uddandapur LISS for lifting addl.1TMC water)	T.O.O.(CE-400kV) Ms.Nos.467 & 468, Date: 25-10-2019.	250.00	**	347.17	2028				250.00	250.00																				
TOTAL				402.48		799.65	4055.00			0.00	0.00	502.48	0.00	502.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FY 2027-28																																
1	Bulk Load/DC Works	Palamuru Rangareddy Lift Irrigation Scheme (400/11kV,165MVA PTR Bay extensions at 400/11kV NarlapurSS,400/11kV Yedula LISS,400/11kV Vattem LISS & 400/11kV Uddandapur LISS for lifting addl.1TMC water)	T.O.O.(CE-400kV) Ms.Nos.467 & 468, Date: 25-10-2019.	97.17		347.17(**)	2028			-	-	-	97.17	97.17																		
(**) - The Amount includes Development charges,Estt & Other Charges,Operational Overheads and GST.																																
TOTAL				97.17		0.00	2028.00			0.00	0.00	0.00	97.17	97.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FY 2028-29																																
PRLIS TOTAL										407.01	200.00	502.48	97.17	1206.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LI Schemes GRAND TOTAL										1759.94	932.05	1072.73	145.82	1206.66	2606.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	48.65	0.00	48.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ANNEXURE - C

Reply to Point. No. 3

(a) Methodology for carrying out Load flow studies:

- i. Base case PSSE (Power System Simulator for Engineering) file of FY 2022-23 with existing network is considered and FY 2028-29 PSSE case file is prepared duly considering the proposed generation, transmission network and estimated load.
- ii. The load flow studies are carried out for FY 2028-29 of 5th Control Period duly considering the generation of 16004.2 MW, transmission network and estimated load of 21962 MW for FY 2028-29 using PSSE software.
- iii. The line loadings, transformer loadings, bus voltages and short circuit values are observed and confirmed as per prescribed limits of Transmission Planning criteria. Further, (N-1) contingency for all the transformers and lines at 400kV & 220kV level is also ensured.

(b) Assumptions and parameters for carrying out Load flow studies:

- i. Generation Availability for various generators are considered as follows:

Thermal	-	85 %
Hydel	-	70 %
Solar	-	85 %
Wind	-	55 %
- ii. Conductor Parameters and Thermal loading limits are considered as per CEA Manual on Transmission Planning Criteria, 2023.
- iii. The standards adopted for load flow studies are already mentioned at para 2.3 (A) to (G) in Chapter-2 of Resource Plan Report at page no.31

ANNEXURE - D

Existing LI Schemes in TSTRANSCO :

Sl. No.	Name of the Scheme/Pump House/Substation	District	No. of pumps X Capacity Of each pump	Required Load (in MW)	Date of Commissioning
1	AMR LIS	Nalgonda	4 x 18 MW	72	
2	Alisagar LIS	Nizamabad			
	a) Kosli 132/11kV SS		4 x 2.10 MW	8.4	21.06.2007
	b) Bhagepally 132/11kV SS		4 x 2.85 MW	11.4	14.06.2007
	c) Janakampet 132/11kV SS		4 x 1.20 MW	4.8	13.06.2007
	<i>Sub-total</i>			24.6	
3	Argula Rajaram (Gutpha) LIS	Nizamabad			
	a) Ch.Kondur 132/11kV SS		4 x 2.55 MW	10.2	12.05.2007
	b) Dharmora 132/11kV		4 x 1.725 MW	6.9	10.03.2007
	<i>Sub-total</i>			17.1	
4	J.Chokka Rao (Godavari) LIS	Warangal			
	a) Gangaram 220/11kV SS	Jayashankar Bhoopalapalli	2 x 8.5 MW stage-I Ph-I	17	12.03.2007
			2 x 12.8MW stage-II Ph-II	25.6	29.06.2011
	a) Gangaram 220/11kV SS phase-III		6 x 16MW stage-III Ph-II	96	2016-17
	b) Bheemghanpur 220/11kV SS	Jayashankar Bhoopalapalli	2 x 8.5 MW stage-I Ph-I	17	10.03.2007
			2 x 11.75 stage-II Ph-II	23.5	30.05.2011
	c) Pulakurthy 220/11kV SS	Warangal Rural	2 x 6 MW Ph-I	12	10.12.2007
	d) Dharmasagar 132/11kV SS	Warangal Urban	2 x 3.0MW stage-I Ph-I	6	01.08.2007
			2 x 13.6 stage-II Ph-II	27.2	08.05.2011
	<i>Additional load at Dharmasagar</i>		<i>2X5.5 MW</i>	15	10.01.2018
	e) Salivagu 220/11kV SS	Warangal Rural	2 x 12.5MW Ph-II	25	29.08.2010
	f) 132/11kV SS Gandiramaram under Godavari LIS Phase-III	Jangoan	2 x 4.25MW+2 x 5MW	18.5	10.01.20118
	g) 132/11kV SS Bommakuru under Godavari LIS Phase-III	Jangoan	2x3.25+2x8	22.5	05.02.2018
	<i>Sub-total</i>			305.3	
5	Rajeev (Bhima-1) LIS	Mahaboob Nagar			
	Panchadevpada 132/11kV SS (EPC)		3 x 12 MW	36	17.02.2010
	Khanapur 132/11kV SS (EPC)		3 x 4 MW	12	09.09.2013
	<i>Sub-total</i>			48	
6	Bhima-2 LIS	Wanaparthi			
	a) Tirumalayapalli 132/11kV SS (EPC)		3 x 12 MW	36	24.12.2010
	b) Kothakota 132/11kV SS (EPC)		3 x 4 MW	12	16.11.2010
	<i>Sub-total</i>			48	
7	Kalwakurthy LIS				
	Regumanugadda 220/11kV SS (EPC)	Nagar Kurnool	5 x 30 MW	150	19.12.2011
	Jonnalaboguda 220/11kV SS (EPC)		5 x 30 MW	150	19.12.2011
	Gudipalligattu 220/11kV SS (EPC)	Wanaparthi	5 x 30 MW	150	25.06.2016
	<i>Sub total</i>			450	
8	Nettampad LIS	Gadwal			
	1) Gudamdoddi 220/11kV (EPC)		4 x 17 MW	68	01.08.2012
	2) Marlavidu 220/11kV (EPC)		3 x 17 MW	51	23.11.2012
	<i>Sub total</i>			119	
9	Sripada Sagar LIS				
	a) Yellampally 132/11 KV SS	Peddapalli	4 x 2.5 MW	10	25.03.2011
	b) Medaram 220/11 KV SS		4 x 15.79 MW stage-I	63.16	2016-17
	c) Vemnur 220/11 KV SS		4 x 10.5 MW stage-I	42	23.08.2016
	d) Gangadhara 132/11 KV SS	Karimnagar	4 x 6.8 MW	27.2	04.09.2016
	<i>Sub-total</i>			142.36	

Sl. No.	Name of the Scheme/Pump House/Substation	District	No.of pumps X Capacity Of each pump	Required Load (in MW)	Date of Commissioning
10	Kollsagar LIS (EPC)				
	Near Marikal Village 132/11kV SS(EPC)	Mahaboob Nagar	2 x 7.5 MW	15	25.09.2013
	Near Nagireddypally 132/11kV SS (EPC)		2 x 7.5 MW	15	07.11.2013
	<i>Sub-total</i>			30	
11	Kaddem LIS	Mancherial			
	Gudem 132/11kV SS		2 x 4.2 MW	8.4	03.09.2014
12	AMRP LLC LIS Near Pulia Thanda 220/11kV (EPC)	Nalgonda	3 x 4 MW	12	09.11.2016
13	Bhakta Ramadasu LIS in Khammam	Khammam			
	b) Dubbathanda 132/11kV SS		2 x 10.5	21	24.12.2016
14	J.Chokka Rao (Godavari) LIS- Ph-3				
	1) 132/11kVSS Ramappa (Rangarao Palli)	Jayashankar Bhoopalapalli	2 x 5.5 + 2 x 6 MW	23	25.10.2019
	2) Bay extension at Bheem Ghanpur	Jayashankar Bhoopalapalli	3x21 MW	63	14.08.2019
	<i>Sub total</i>			86	
15	Kaleshwaram Lift Irrigation Scheme				
	Package Nos 6 Medaram 400/11 kV GIS	Peddapalli	7 x 124.8 MW	873.6	28.08.2018
	Package Nos 8 Ramadugu 400/13.8/11 kV SS	Karimnagar	7 x 139 MW	973	06.05.2018
	Package Nos 9 Malakpet 132/11 kV SS	Rajanna Siricilla	2 x 30 MW	60	29.06.2020
	Package Nos 10 Tippapur 400/11 kV SS	Rajanna Siricilla	4 x 106 MW	424	29.04.2019
	Package Nos 11 Chandulapur 400/11 kV SS	Siddipet	4 x 134.8 MW	539.2	06.05.2019
	Package Nos 12 Tukkapur 400/11 kV SS	Siddipet	8 x 43 MW	344	19.09.2019
	Sundilla pump house 400/220/11 kV SS	Peddapalli	9 x 40 MW	360	13.08.2018
	Annaram pump house 220/11 kV SS	Peddapalli	8 x 40 MW	320	14.09.2018
	Medigadda Pump house 220/11 kV SS	Jayashankar	11 x 40 MW	440	29.09.2018
	<i>Sub total</i>			4334	
16	Package No. 28 132/11kV Kanakapur SS	Nirmal	1 x 7.15 MW + 1 x 5.32 MW	12.47	26.11.2018
17	Chanaka Korata LIS 132/11 kV SS at Hathighat	Adilabad	3 x 5.5 MW + 3 x 12 MW	52.5	01.03.2019
18	Kaleswaram LIS				
	b) Beersagar (Kannepalli) 132/11kV SS	Karimnagar	1 x 2.66 MW + 2 x 8.1 MW	19	30.06.2020
19	LI Scheme at Jogapur (Under Sripada Yellampally Project)				
	132/11kV Jogapur SS	Rajanna Sirisilla	4 x 2.9 MW + 2 x 1 MW	13.6	30.05.2018
20	Flood Flow Canal Pumping Station				
	Stage - I Rampur 220/11kV SS	Jagityal	8X6.5 MW	52	17.05.2019
	Stage - II Rajeshwar rao peta 220/11kV SS	Jagityal	8X6.5 MW	52	28.06.2019
	Stage - III Mupkal 220/11kV SS	Nizamabad	8X6.5 MW	52	28.05.2020
	<i>Sub total</i>			156	
21	LIS at Markook and Arkaram				
	220/11kV Akkaram SS	Siddipet	6x27 MW	162	26.04.2020
	220/11kV Markook SS		6X34 MW	204	26.04.2020
	<i>Sub-Total</i>			366	

Sl. No.	Name of the Scheme/Pump House/Substation	District	No. of pumps X Capacity Of each pump	Required Load (in MW)	Date of Commissioning
22	LIS at Thummilla 132/11kV SS Thummilla	Jogulamba Gadwal	2X4.95 MW 1X10.14 MW	20.04	29.11.2018
23	Seetha Rama LIS				
	BG Kottur 220/11kV	Badradri Kothagudem	6 x 25 MW	150	08.06.2022
	V.K.Ramavaram 220/11kV		6 x 40 MW	240	Test Charged on 28.12.2019
	Kamalapuram 400/220/11kV			0	10.11.2021
	a) Towards Rollapadu ph		5 x 40 MW	200	
	b) Towards Sattupally ph		2 x 30 MW	60	
	Sub total			650	
24	Kaleshwaram Lift Irrigation Scheme(Additional 1 TMC Link-I)				
	Medigadda	Jayashankar Bhoopalapalli	6 x 40 MW	240	14.12.2020
	Annaram	Peddapalli	4 x 40 MW	160	28.11.2020
	Sundilla	Peddapalli	5 x 40 MW	200	28.11.2020
	Sub total			600	
25	J.Chokka Rao (Godavari) LIS- Ph-3				
	RS. Ghanpur	Jangaon	2X4.3MW+ 2X1.27MW+ 2X3.5MW	18.14	30.03.2022
26	Thotapally Reservoir to Gouravelly Reservoir LIS				
	Gouravelly (Regonda) 132/11kV	Siddipet	3 x 32 MW	96	28.03.2022
27	Kaleshwaram Lift Irrigation Schemes			0	
	Package Nos 20 - Sarangapur	Nizamabad	3 x 30MW	90	22.12.2021
	Mentrajally		10X2.5 MW	25	31.03.2022
	Sub Total			115	
	Grand Total			7836.51	

Other LIS Schemes under progress

Sl. No.	Name of the Scheme/Pump House/Substation	PTR Capacity (in MVA)/Line length (Ckm)	Date of Commng/ Probable date of Commng.
I	Sita Rama Lift Irrigation Scheme :		
1	220/11 kV Substation at B.G.Kothur	-	08.06.2022
2	LILO of one circuit of 220kV KTPS-Manuguru Line to B.G.Kothur	1.028	08.06.2022
3	LILO of one circuit of 220kV KTPS V-Lower Sileru -II Line to B.G.Kothur	33.39	30.06.2022
4	220/11 kV LI Substation at V.K.Ramavaram	-	28.04.2023
5	LILO of 220kV KTS – Lower Sileru-I Line at 400/220 kV Asupaka SS	1.048	09.06.2020
6	LILO of 220kV KTS - Asupaka Line to 220kV V.K.Ramavaram LI SS	2.832	28.04.2023
7	220kV TMDC Line from 400/220/11kV Kamalapuram SS to 220/11 kV V.K.Ramavaram	28.324	21.10.2022
8	220kV Bays at 220/11 kV V.K.Ramavaram LI SS	2 bays	21.10.2022
9	400/220/11kV LI Substation at Kamalapuram	315 x 2	11.11.2021
10	400kV TMDC line from Julurupadu SS to Kamalapuram LI Sub Station	79.124	10.11.2021
11	400kV Quad Bay extensions at 400/220kV Julurupadu SS (for Kamalapuram 400kV Line)	2 bays	10.11.2021
II	Indira Sagar Rudramkota Lift Irrigation Scheme		
1	400/220kV Asupaka Sub-station	315 MVA	10.08.2017
2	400kV LILO of one ckt of Kalpaka (Vizag) - Khammam 400kV DC line to Asupaka 400/220kV SS	35.7 Ckm	09.08.2017
III	J.Chokka Rao (Godavari) LIS- Ph-3		
	220kV Devannapet	3 x 31 MW+3 MW(Aux)	12.04.2023 , PTRS on 19.06.2023
IV	Udayasamudram LIS Near Chowdampally Vilalge 220/11kV (EPC)	2 x 16 MW	06.03.2023
V	Palamuru - RangaReddy Lift Irrigation Scheme		
1	400/11kV Narlapur LISS		Narlapur Substaion charged on 12.09.2023.
2	400/11kV Yedula LISS		Yedula Substation charged on 12.09.2023.

ANNEXURE - E

The statement showing the revised energy surplus/deficit of TSDiscoms as per the additional information submitted by TSSPDCL vide their letter dated 16-09-2023 due to the combined impact of delay of commissioning of new generating stations, LIS projections received from I&CAD Department and availability as per historical actual PLFs is given below :

Particular	Impact of Energy Balance in Telangana State									
	5 th Control Period					6 th Control Period				
	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34
Energy Availability	93191	100071	99840	99136	96449	96416	96256	93728	95907	96058
Energy Requirement	90587	94885	99371	104310	109354	114344	120062	126205	132790	139819
Surplus/ (Deficit)	2604	5186	469	(5174)	(12905)	(17928)	(23806)	(32477)	(36884)	(43761)
% of Surplus to Availability	3%	5%	0%	-5%	-12%	-16%	-20%	-26%	-28%	-31%